**U.S. ARMY** CAA-2012049



# DEVELOPMENT ACTIVITIES LOCATOR AND ASSESSMENT METHOD

**NOVEMBER 2013** 



CENTER FOR ARMY ANALYSIS 6001 GOETHALS ROAD FORT BELVOIR, VA 22060-5230

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#### DEVELOPMENT ACTIVITIES LOCATOR AND ASSESSMENT METHOD

#### **SUMMARY**

#### THE PROJECT PURPOSE:

To improve the process by which Combined Joint Task Force- Horn of Africa (CJTF-HOA) locates Civil Affairs (CA) teams, selects and resources projects, and assesses projects' contributions to campaign objectives and local national people's well-being.

#### THE PROJECT SPONSOR:

The problem was initially posed by the former CJ-5 of CJTF-HOA, Captain Owen Travis, US Navy. Dr. Shilling formalized the problem statement and Captain Pete Haynes, US Navy, then-current CJ-5, signed the analysis request that formally initiated the study.

#### THE PROJECT OBJECTIVES were to:

- (1) Automate and improve the decision matrix used to recommend the placement of CA teams.
- (2) Identify the principles of effective assistance and integrate those principles into "worksheets" used for assessing needs, comparing and selecting projects, drafting project proposals and plans, and guiding execution and assessment of projects.
- (3) Inject assessment methodology into all aspects of CA projects: planning, execution, and follow-up. Develop "metrics menus" to assist teams in the field in selecting appropriate metrics.

#### THE SCOPE OF THE PROJECT:

Effort is limited to improving the methods used to locate, plan, execute, and assess CA activities in CJTF-HOA's area of operations.

#### THE MAIN ASSUMPTION:

Assistance projects generate two types of effects—development effects and influence effects—and lasting influence effects are unlikely unless beneficiaries receive a lasting development effect.

#### THE PRINCIPAL FINDINGS are:

Considerable consensus exists in the development community on principles that make assistance more effective, and military organizations doing similar work can improve effectiveness by applying these principles.

#### THE PRINCIPAL RECOMMENDATIONS are:

(1) The inclusion of items designed to ensure local national ownership, capacity-building, and sustainability of development projects in project nomination forms greatly increases the likelihood of a significant and long-lasting development effect.

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(2) A lasting development effect greatly increases the likelihood of a satisfactory and long-lasting influence effect that changes the attitudes and behaviors of local national people toward American organizations.

THE PROJECT EFFORT was conducted by Adam Shilling, PhD.

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# 1 INTRODUCTION

#### 1.1 Problem Statement

Combined Joint Task Force- Horn of Africa (CJTF-HOA) is not satisfied with the methods they currently use to plan for and assess development, relief, and other non-lethal activities. The command is concerned that these activities, usually performed by attached Civil Affairs (CA) teams, are not as effective as they could be and that assessment of these activities can be improved.

A great deal of literature, including news reports, editorials, academic research and official reports from governments, non-governmental organizations (NGOs), and international organizations, states or implies that U.S. Government (USG) development and stabilization initiatives often fail to achieve their objectives. Some examples include:

- Commission on Wartime Contracting (2011). *Report to Congress: Transforming Wartime Contracting.*
- William Easterly (2006). The White Man's Burden: Why the West's Effort to Help the Rest Have Done So Much Ill and So Little Good.
- Non-Governmental Organization (NGO) Consortium (2011). White Paper: Being Smart About Development in Afghanistan.
- Oxfam America (2008). Smart Development: Why U.S. Foreign Aid Demands Major Reform.

These programs often fail to achieve their objectives due to poor planning or execution, and therefore, waste American and international resources. The following report is an attempt to determine what must be done to make Department of Defense (DoD) initiatives more successful.

# 1.2 Key Definitions

The reader requires some key definitions:

- Assessment, in Civil Affairs and development agency usage, refers to processes of gathering and organizing information about the civil environment and the needs of people in it. It is somewhat analogous to intelligence preparation of the battlefield (IPB).
- Assessment also refers to the processes that are used to evaluate the effectiveness of the U.S. Government's activities and to gauge progress toward campaign objectives.
- *Beneficiaries* are the persons, organizations, or institutions that benefit from a project or engagement. Use of the term within the study usually will NOT refer to the USG or U.S. military although projects or engagements are hoped to bring collateral benefit to American organizations.
- A *development effect* is a change in beneficiaries' well-being or capacities due to the project or an engagement. Development effects provide local national beneficiaries with reasons to cooperate with USG and U.S. military.

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- An *influence effect* is the change in local national attitudes or behaviors toward the U.S., USG, U.S. military or allies resulting from a project or an engagement. Influence effects are usually those that directly impact campaign plan objectives, but are not those that interest local national actors.
- *Stakeholders* are people or organizations that perceive themselves as having an interest in a project. All beneficiaries are stakeholders, but not all stakeholders are beneficiaries.

I would like to highlight two key points.

First, "assessment" has two definitions. The first, commonly used in Civil Affairs doctrine, at the United States Agency for International Development (USAID), and in the development community, refers to activities undertaken to understand the operational environment and the needs of the people in it, *before* action is taken. This affects the selection of the best among several possible development interventions. This type of assessment is analogous to intelligence preparation of the battlefield (IPB). It also provides the baseline to which subsequent assessments are compared.

The other meaning, most common in the DoD, refers to attempts to judge the effect of actions *already taken* under a campaign plan, relative to the goals of the campaign.

Of course, if one imagines a circular problem-solving method in which an assessment is followed by an action, then another assessment, in a cycle, "before" and "after" assessments are seen to have the same nature.

Second, and more important, DoD-funded development activities usually have objectives that fall into two distinct categories. The immediate objective of a development activity is development—an improvement in the well-being of the affected populace. The study refers to these improvements as "development effects."

On the other hand, DoD agencies are motivated to fund development activities for some purpose other than development. Typically, DoD projects are designed to influence attitudes or behaviors of the affected populace relative to a military objective. The study will refer to these as "influence effects."

The latter are what the military hopes to get, relative to the campaign plan, from executing the project, and the former are what the local people hope to get from cooperating with U.S. forces.

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# 1.3 Improving Processes

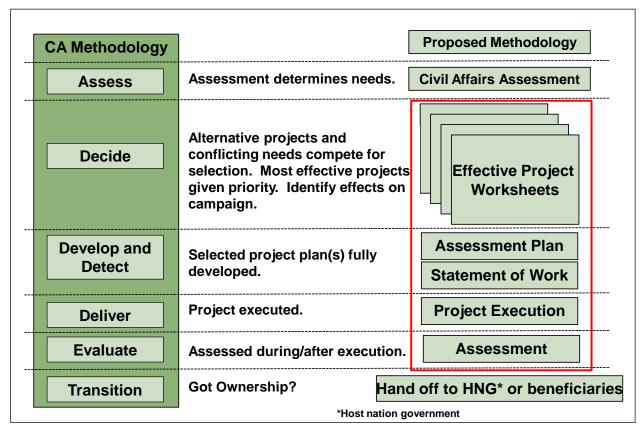


Figure 1. Improving Processes

On the left side of the chart in Figure 1 is the "CA methodology" found in Field Manual (FM) 3-57 *Civil Affairs Operations* (2011). On the right is a breakdown of that methodology to illuminate how proposed improvements to planning and assessment methods integrate into, but do not change, CA doctrine. The red box indicates where this section of the study is seeking to refine the CA methodology.

# 1.4 Assumptions

The study's assumptions were:

- Assistance projects generate two types of effects—development effects and influence effects.
- Neither effect can be assumed to be positive—U.S. actions have unintended effects, which can lead to unexpected outcomes.
- Lasting influence effects are not likely unless beneficiaries receive a lasting development effect.
- Assessment works best when integrated throughout project planning and execution.
- Principles of effective assistance are known—outside the DoD. They are often difficult to execute.

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- Project planning that adheres to principles of effective assistance both increases the likelihood of a positive effect and maximizes the magnitude of that effect—whether it be a development effect or an influence effect.

The assumptions speak for themselves, but I would like to amplify the third. In my experience as a civil-military operations officer for a brigade combat team in Iraq, I found many military personnel to be focused on the influence effect for which a development activity is pursued. For them, the purpose of the activity is to generate this influence effect, while the development effect is of almost negligible importance.

I argue that this attitude is shortsighted. The local people have no inherent reason to support U.S. objectives, but every incentive to cooperate with the United States to make their lives better. This cooperation is an opportunity to influence them.

Additionally, planning development activities to produce a "win-win" situation has the potential to make development activities part of a transformational relationship, rather than merely a transactional exchange. In this paradigm, Americans observe local people's actual needs, and plan, in cooperation with them, to build sustainable improvements to their lives according to an agenda that local people choose for themselves.

Failing the creation of a transformational relationship, at a minimum, a DoD-funded development activity is a transaction between local people and the U.S. military where the United States trades the project for a desired behavior from the local people. Provided the locals agree to this transaction explicitly, it is difficult to get them to agree to maintain the behavior we desire if the project is no longer delivering the benefits they expect.

Therefore, even if our development activities are merely transactional, we still want them to have a reasonable lifespan, to be "sustainable."

# 1.5 Essential Elements of Analysis and Objectives

The following Essential Elements of Analysis (EEAs) and Measures of Effectiveness (MoEs) are part of the researcher's attempt to ensure the quality of the study and to ensure it achieves its objectives.

- Objective 1: More effective decision matrix for placement of CA teams, which is automated for ease of use.
  - o EEA 1.1: Can automated matrix be used by operational planners?
    - MoE: Yes/No.
  - o Product: Automated Decision Matrix in *Excel*.
- Objective 2: Effective Projects.
  - EEA 2.1: What is the strength of consensus in the development community for key "principles of development"?
    - MoE: Strength of consensus on synthesis matrix.
  - EEA 2.2: Can principles with strong consensus be integrated into project planning and selection?
    - MoE: Yes/No

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- o Product: Effective Projects Worksheets.
- Objective 3: Integrated Assessment Method.
  - EEA 3.1: Do complete assessment plans become a mandatory part of project planning before project execution?
    - MoE: Yes/No.
  - EEA 3.2: Are relevant engineering/safety standards included in statements of work (SOWs)?
    - MoE: Yes/No.
  - EEA 3.3: Are assessment visits performed during and after execution to ensure project delivers intended benefits over time?
    - MoE: Yes/No.
  - o Product: Assessment Template.
  - o Product: "Metrics Menu."

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## 2 CIVIL AFFAIRS LOCATION DECISION MATRIX

#### 2.1 Automation of Decision Matrix

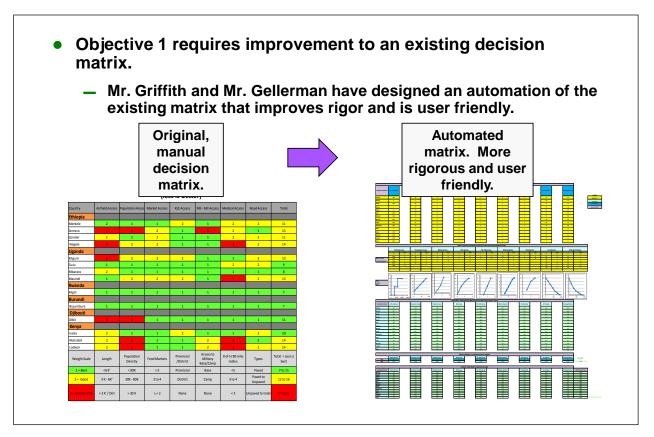


Figure 2. Automation of Decision Matrix

The first objective sought to automate and improve the existing decision matrix used by the CA battalion for assigning CA teams to a location within the Combined Joint Task Force (CJTF) area of responsibility (AOR) in January 2012. Several CAA analysts with programming experience contributed to an *Excel*-based upgrade. Mr. Griffith, who was deployed to the CJTF staff at that time, spearheaded this effort and produced an automated version of the CA battalion's matrix. The feedback from the CA battalion was positive, but the tool created does not explicitly consider the desires of key individuals, such as the CJTF commander and U.S. ambassadors in candidate countries.

One Senior Executive Service (SES) leader at the Pentagon, when briefed on the study, criticized the choice of criteria the CA used. He pointed out that the criteria in the matrix determined here it was easiest for the CA to work, and not where the CA was needed to improve U.S. influence or access.

# 2.2 Automated Decision Matrix Sample Output

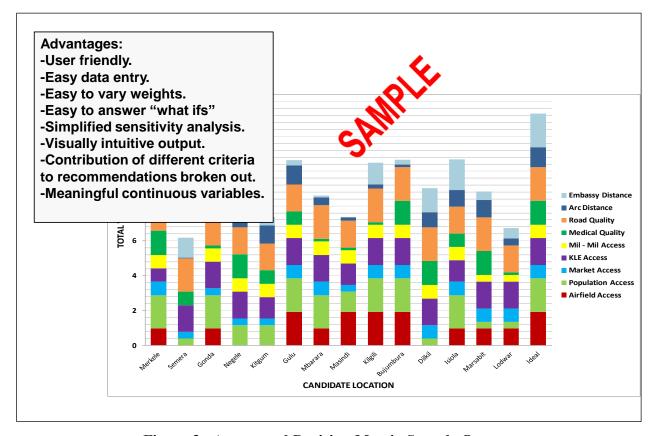


Figure 3. Automated Decision Matrix Sample Output

Figure 3 above displays a sample output of the improved matrix. It is more user-friendly and allows analysts to easily vary weights of criteria in order to answer questions or conduct sensitivity analysis. The output is intuitive: the tallest bar is the "best" option, and the contribution of each criterion to recommended solutions is easily distinguished by the colors.

## 3 PRINCIPLES OF EFFECTIVE ASSISTANCE

## 3.1 Project Design Improvement

I approached this study with experience as a brigade civil-military operations officer, and I thought the apparent problem with development activities was not merely the inability to document the progress we were making. Rather, I believed that a given project achieved less than its potential because our project design procedures could be improved.

A survey of literature provided evidence for this belief. Projects were less effective than their potential due to poor project design. Thus, the task was not merely to improve the documentation of progress via assessment, but to improve the selection and planning of projects to be more effective relative to both desired development and influence effects.

Under the assumption that lasting influence effects are unlikely without lasting development effects, most of this report is about achieving lasting development effects.

Influence effects are achieved by the placement of a developmentally-successful project among the right group of local people at the right time.

# 3.2 Project Planning and Selection

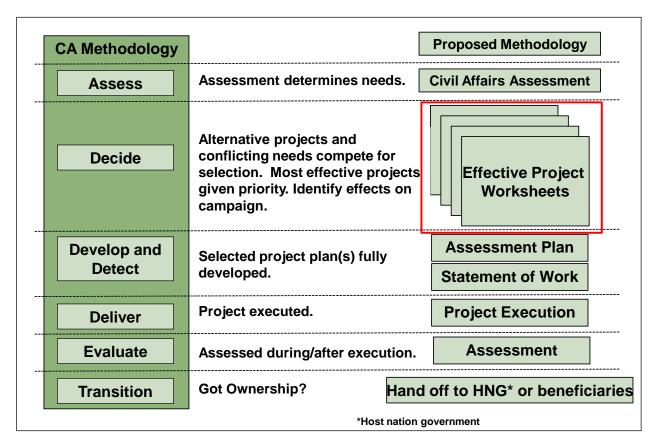


Figure 4. Project Planning and Selection

Project planning and selection requires tools to assess needs, prioritize needs, ensure project planning/proposal-writing are in keeping with best practice, and project execution and assessment are integrated from project initiation.

This section of the report deals with refinement of the "Decide" portion of the CA methodology shown in Figure 4 above, as indicated by the red box. Project planners evaluate project nominations using the principles discussed below to determine which projects are likely to succeed in achieving the desired development effect.

The second objective sought to refine this portion of the CA methodology by identifying the principles of effective assistance and applying them to the project nomination process in order to select and plan the projects most likely to succeed.

A brief overview of the CA methodology may be helpful. The steps are:

- Assess—Conduct a baseline assessment of the civil environment and development needs. It should answer such questions as:
  - What is the current state of relevant civil matters? (CA assessment checklists exist and are a good place to start.)
  - What are local people's needs (relative to objective standards from appropriate organizations)?
  - o What are local people's self-perceived needs?
  - What are local people's preferences?
- Decide—Generate alternative project proposals and determine those to be funded.
- Develop and Detect—Develop comprehensive project and assessment plans.
- Deliver—Execute the project.
- Evaluate.
- Transition.

CA manuals contain some useful, detailed assessment templates for an initial assessment of the state of civil affairs in a given area.

In addition to the assessment templates, it is essential to ask the people what they want, and what they feel they need, and compare these with trained observation on what they might actually need relative to published standards. These three things might not agree.

This, however, begins a conversation between U.S. soldiers and local people that might develop into a project. The conversation is necessary because soldiers are limited in that they do not understand the culture or problems local people face. Local people are limited in their vision. They often know little of the outside world, little of the potential of their lives to change for good or ill, and may not understand their own assumptions about their lives that hold them back.

The conversation mitigates the shortcomings of both groups, and may also begin a transformational relationship that might achieve the influence effect that U.S. commanders desire.

# 3.3 Determine Principles. What makes projects effective?

Given that development is not DoD's area of expertise, consultation with organizations with development expertise may help DoD improve its activities. I did this by finding written

statements from as many of these organizations as I could and comparing them in a qualitatively rigorous fashion.

This literature review reveals apparent consensus among relevant organizations on the principles of effective assistance. Each group had a different emphasis or made statements in different ways, but they still agreed.

To demonstrate this consensus, I used a qualitative synthesis technique. I started with the "nine principles of development" published by the U.S. Agency for International Development (USAID) and compared other organizations' statements to USAID's. Then I observed and highlighted areas where consensus exists.

## 3.4 USAID's "Nine Principles"

I based the comparison on USAID's "nine principles of development" as defined and explained in USAID documents. These are:

- *Ownership*: Build on the leadership, participation, and commitment of a country and its people.
- *Capacity-Building*: Strengthen local institutions, transfer technical skills and promote appropriate policies.
- Sustainability: Design programs to ensure their impact endures.
- *Selectivity*: Allocate resources based on need, local commitment, and foreign policy interests.
- Assessment: Conduct careful research, adapt best practices, and design for local conditions.
- *Results*: Focus resources to achieve clearly defined, measurable, and strategically-focused objectives.
- *Partnership*: Collaborate closely with governments, communities, donors, NGOs, the private sector, international organizations, and universities.
- *Flexibility*: Adjust to changing conditions, take advantage of opportunities, and maximize efficiency.
- *Accountability*: Design accountability and transparency into systems and build effective checks and balances to guard against corruption.

I found as many concise statements of principles from different development organizations as I could and compared them to USAID's principles in a matrix (Figure 5 below).

The following section identifies and briefly describes the organizations in the analysis, and then provides the name of each respective statement of principles.

# 3.5 Statements of Principle

Literature review began with any development or relief organization that had a relatively concise list of principles to guide their actions.

Initial searches and following up on citations led to the following:

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- USAID, the U.S. Government's lead agency for international development. Their statement was called "Nine Principles of Development."
- Paris Declaration on Aid Effectiveness, a meeting of senior officials from donor and developing-country governments, development banks and international agencies. Their statement was entitled the "Paris Declaration on Aid Effectiveness."
- International Committee of the Red Cross (ICRC), a humanitarian organization with special status among governments; it is recognized in the Geneva Conventions. Its statement is known as the "Code of Conduct."
- Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), an international organization of 30 governments, including the United States, whose charter is "to address the economic, social and environmental challenges of globalization." Its statement was the "DAC Principles for Evaluation of Development Assistance."
- Sphere Project, "a group of NGOs and the Red Cross and Red Crescent Movement [formed] to develop a set of universal minimum standards in core areas of humanitarian response..." This group's findings are known as the "Core Standards."
- Australian Agency for International Development (AusAID), Australia's lead agency for international development. They have published a statement called the "Statement of International Development Practice Principles."
- Interaction, the "largest alliance of U.S.-based international non-governmental organizations (NGOs), with more than 190 members working in every developing country." They published the "Principles for Effective Assistance."

## 3.6 Synthesis Matrix

	"Stra	tegic"		"Opera	tional"/"T	actical"	
USAID "Nine principles"	USAID	Paris Declaration	ICRC	OECD-DAC	Sphere Project	AusAID	Interaction
Ownership	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity building	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sustainability	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Selectivity	Yes	Yes	Yes		Yes		
Assessment	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Results	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Partnership	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Flexibility	Yes	Yes		Yes	Yes		
Accountability	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lack of Consensus							
Impartiality	No	No	Yes	Yes	Yes	No	Yes

Impartiality defined: Humanitarian aid is not a partisan or political act; aid is given based on need alone. Why? 1. Humanitarian imperative; 2. Maintains access to those in need; 3. Protects "neutrality" of aid workers.

Figure 5. Synthesis Matrix

I arranged a synthesis matrix that displays organizations across the top and USAID's principles down the left-hand side. "Yes" in the matrix in Figure 5 above indicates that an organization agrees with the principle on that line. "No" means they disagree, and a blank space indicates that an organization's statement did not mention that principle explicitly.

Additionally, I added "impartiality" to the left-hand side because it was the only major principled disagreement between organizations. Organizations associated with governments felt no obligation to be impartial in conflicts in the developing world; rather they could and would use aid to affect political outcomes. In contrast, private organizations are motivated by a "humanitarian imperative." They believe that need is the sole criterion for aid, and they attempt to maintain a strict neutrality in conflicts.

The credo of impartiality can limit the ability of private organizations to work with the DoD in conflict zones.

The first three items on the list—ownership, capacity building, and sustainability—are what I will call the "big three." Development organizations universally subscribe to these. I will make the case that these are essential to successful development outcomes, and that a development project plan should explicitly address these issues to maximize the likelihood that it will be effective.

The remaining principles are things all organizations aspire to in pursuit of organizational objectives.

Andrew Natsios, a former Administrator of USAID, agreed with my analysis. He wrote, in *Parameters*:

"Ownership, capacity building, and sustainability form an iron triad of principles underscoring all successful and enduring development and reconstruction projects." (Parameters, Autumn 2005, p. 11)

## 3.7 Effective Projects Worksheets

A theoretical identification of the "big three" is not sufficient to ensure their use in the formation of development activity plans. DoD practitioners need a way to make this knowledge useful. I propose the mandatory use of a series of "worksheets" containing questions that should answered or issues that should be addressed in order for project proposals to be evaluated, prioritized, selected, funded, and executed.

Collectively, I will call these "Effective Projects Worksheets." Their purpose is to force practitioners to consider the "big three," and to identify and mitigate key risks to the "big three."

Additionally, military organizations have long made explicit the purpose of any activity they undertake, so that subordinates can clearly understand what the commander wants. Development activities should be no different. The explicit statement of the objective makes its achievement more likely.

While the commander is likely most interested in influence effects, the explicit statement of the desired development effects makes their achievement more likely as well. Since a lasting development effect is essential for a lasting influence effect, the achievement of the development effect that the local people desire is essential to the achievement of the influence effect that the commander desires.

Explicit consideration of the purposes of an activity and the "big three" via an "Effective Assistance Worksheet" would ask these or similar questions:

- Purpose: What influence effect do we expect (refer to campaign objectives)? What benefit do we expect to accrue to local beneficiaries (development effect)? Do we want to publicize the project? Will USG and/or host nation get credit?
- Ownership: Who are the stakeholders? How have they been engaged? How are they active in planning the project? How will beneficiaries contribute to the project through their own resources?
- Capacity-building: Are local capacities improved so that project is sustainable? Can local people run it themselves? Do local people need training? How will this happen?
- Sustainability: Do the beneficiaries have the will and capacity to maintain the project? How will they do this? How will local national government officials support the project? Does the U.S. need to fund maintenance? For how long? How does the project interact with other USG initiatives? With civil society initiatives?

The next several paragraphs detail lists of questions designed to ensure project design identifies and mitigates risks to the "big three." These questions assist in assessing and addressing important risks to achievement of either development or influence effects.

Much of the criticism contained in the literature on development activities in conflict zones reflects the ease with which funds or materials can feed corruption or be diverted due to criminal activity, such as extortion or theft. Additionally, projects can have unintended economic consequences by impacting markets, businesses or consumers in unexpected ways.

Determining the likelihood and severity of risk inherent in these types of unintended effects is critical to the execution of a project that will have a net positive effect among the target population. Identification of risks permits mitigations to be designed into the project plan or may require cancellation of the project.

The "Corruption, Criminality, and Economic Risk Assessment" questions are designed to illuminate such risks:

- What is the risk that project will feed corruption or criminality?
- What is the opportunity of local officials or traditional leaders to embezzle from the project?
- What is the likelihood insurgents or criminals will receive protection money?
- What is the risk of materials being stolen from project inventory?
- Will local people be subject to intimidation or violence?
- What is the risk the project will be converted to an unintended use?
- Will the project damage ("crowd-out") local businesses?
- Will local procurement of materials negatively impact local markets by creating shortages or raising prices?
- Will the project disproportionately benefit a private individual or company or create unfair competitive advantage for an individual or company?
- What are other potential unintended effects of a project? Does it threaten particular interest groups? Traditional leaders? Rival groups? Businesses? Criminals?
- How can identified risks be mitigated? What is the residual risk?

Additionally, projects may have unintended effects on the environment that may lead to adverse effects on the people we are trying to benefit. Some, if identified, can be mitigated easily. Others may require fundamental reconsideration of the project.

The following questions represent an initial attempt at development of a simple "Environmental Risk Assessment" that may be sufficient for small-scale projects. The list could possibly be improved by someone with a background in environmental engineering.

- Will the project enable or encourage the population to engage in environmentally unsustainable practices, e.g., exceed carrying capacities for rangeland; change hydrology or water use patterns; over-consume energy stocks like gas, bio-mass, or electricity?
- Does the project create toxic byproducts? Can this be mitigated?

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- Will changes in people's behaviors due to the project create environmental problems?
- Will the project work in the dry and rainy seasons? In summer and winter?
- Does project design avoid creating hazards or mitigate likely hazards, e.g., does the project protect a newly created water source from contamination?

Planners also want to think carefully about which group a project benefits, directly and indirectly, and which groups it might hurt, and also, which group might be resentful that the neighbors got something they did not.

Planners need to be sure that the beneficiaries own the property the project sits on so that they can benefit from it over a reasonable project lifespan.

Planners want to know if the project is employing local firms and workers or importing others from outside the area, and confirm that local firms, if contracted, have the expertise and equipment needed to complete the project satisfactorily.

The following "Distributed Benefits Worksheet" questions address such issues:

- Who owns the land on which a project will be executed? Does land title need to be transferred? To whom?
- Are there other property rights issues? Water rights? Navigation? Rights of way?
- Who is the prime contractor? Sub-contractors? Do local firms/groups/people have the capacity (expertise and physical ability) to do the work?
- How much local labor is employed? Is there opportunity for "sweat equity"?
- What materials, equipment, or expertise is required which are not available locally?
- Are there "losers" if the project is executed? Who are they? Why? Can they be co-opted or compensated?
- Does the project compensate beneficiaries for an activity they have done themselves in the past? That is generally undesirable; is there some characteristic of that activity that would make it desirable to compensate it?
- Is the project likely to create or encourage dependency?

These questions or modifications of them should be added to existing project nomination worksheets, such as those in the Overseas Humanitarian Assistance Shared Information System (OHASIS), to ensure that project planners consider these issues.

## 4 INTEGRATING ASSESSMENT

The third objective sought to integrate assessment into project planning. This required the development of tools for planning and implementing assessment as an integral part of project planning, execution, and follow-through.

To accomplish this, I surveyed literature to determine the key elements of an assessment plan. These key elements must be integrated into the project plan.

#### 4.1 Assessing Progress

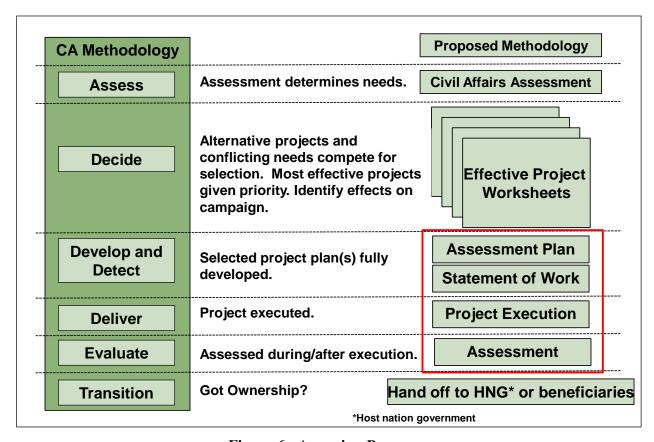


Figure 6. Assessing Progress

Integration of the assessment plan into the project plan not only enhances the formal assessment of the project, but also improves the project plan by improving the understanding of the environment and the likely second-order effects that stem from project execution. This section of the report attempts to refine the portion of the CA methodology that is contained in the red box in Figure 6 above.

One key part of the project plan, particularly if the plan requires contracted labor or expertise, is the statement of work (SOW). It is the core of the contract because it sets out the standards for the work being done, and therefore, constitutes the contractor's obligations to the funder.

A poorly-specified SOW leaves out critical quality standards, and leaves the quality of work completely up to the contractor. It is impossible for the funder to say later that the work is not to

standard if the standards are not spelled out. Poor specifications are why the United States has paid for a number of shoddy and unsustainable projects in the past decade.

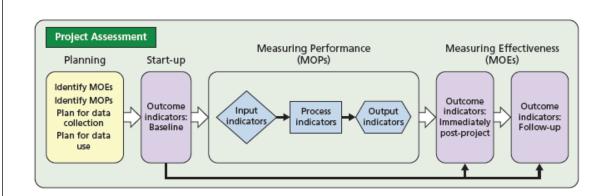
The International Building Code, published by the International Code Council, can serve as the basis of standards that are written into statements of work. The key is to ensure safe and well-built projects in accordance with standards, but not to build things that cannot be maintained locally.

A recent Naval Postgraduate School thesis, entitled *Sustainable Construction in Afghanistan* (2010) by LCDR Legena Malan, argues that construction in Afghanistan is better if it uses local materials and techniques and conforms to local customs so that it is both acceptable to the people and maintainable by the people. Project planners must blend international standards with local techniques for optimal results.

It is useful at this point to make several additional observations about assessment:

- "Assessment" in this context refers to campaign assessment—determining the effectiveness of activities in achieving goals. Development agencies refer to this as "evaluation" or "monitoring and evaluation."
- The purpose of assessment (evaluation) is to determine if objectives are being met, internalize lessons learned, and adjust project activities to be more effective or more appropriate to a changing situation. Assessment also provides accountability to donors, local national authorities, and beneficiaries.
- Assessment is best when planned in parallel with project planning; the assessment plan is an integral part of the project plan. Assessment is an ongoing process to ensure a project delivers the intended benefits over a reasonable lifespan.
- Quantitative measures are desirable, but activities that are most "transformational" are also the hardest to measure quantitatively (Natsios, 2010).
- Assessment depends upon a *manageable* set of measures of performance (MoPs) and measures of effectiveness (MoEs), and will likely include relevant local or international standards of quality (e.g., water quality for a drinking water project).

# 4.2 A Project Assessment Model



- Resource:
  - Haims et al. (RAND\*) (2011). Developing a Prototype Handbook for Monitoring and Evaluating DoD Humanitarian Assistance Projects.
- A model of project assessment developed for DoD HA\*\* projects.
- Report is relatively short and contains a lot of information on how to nest project objectives under campaign objectives.

\*The RAND Corporation
\*\*Humanitarian Assistance

Figure 7. A Project Assessment Model

A mental model serves to organize our thinking about a particular task. Such a model is beneficial for designing and assessing development projects. The RAND Corporation has designed a model to organize project assessment.

# 4.3 Assessment Planning in Parallel

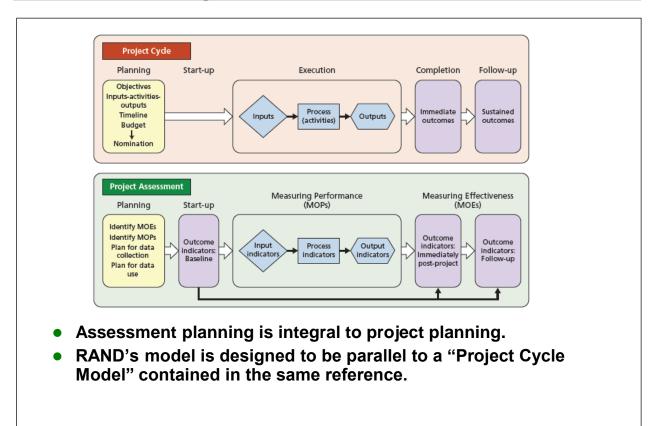


Figure 8. Assessment Planning in Parallel

Since the assessment and the project are planned together, the assessment model should be used in parallel with a project cycle model that organizes our thinking about project planning and design. RAND has also developed a project cycle model that works in parallel with their assessment model.

# 4.4 Assessment Template – Before/During Execution

In addition to RAND's work, I have identified some questions that planners should answer before beginning the project and during project execution. They are:

- Is there a relevant baseline of conditions existing prior to project execution?
- How have beneficiaries and stakeholders been included in project design and planning?
- Are they willing and able to contribute meaningfully to the project?
- What local codes or international standards are appropriate and should be part of the statement of work?
- Do we have the expertise and access to ensure the contractor meets the standards contained in the statement of work? Where can we obtain this expertise?
- Are project management indicators being met (see "core indicators" below)?

The second and third questions ensure beneficiary ownership of the project. Planning it makes it theirs and makes it meet their needs. Contribution to it means they really want it. It is the crucial test of ownership.

# 4.5 Assessment Template - After Execution

Other questions are appropriate after the project is complete. These questions also touch on ownership, but they are designed to confirm the sustainability of the project and to ensure local national capacities were built. They also capture lessons learned and directly test whether the desired effects were achieved.

- Does the project deliver intended benefits 30 days after completion? 90 days? 1 year?
- Is the project being used as intended?
- Are local people managing, maintaining, and sustaining the project themselves? How? (This might be a lesson learned or a best practice...)
- How have local capacities improved?
- How do actual benefits compare to anticipated benefits? Are the beneficiaries satisfied? How do we know they are?
- Did the project achieve its purposes (development and influence effects)? How do we know?
- What additional MoPs and MoEs provide evidence that we were successful? How will these be collected?



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### **5 METRICS MENUS**

One of the study goals was to develop a series of "metrics menus" from which a project planner could select several metrics to assess the success of the project.

I found that the issues surrounding the most common DoD project types are not quite that simple. Selecting, collecting, and evaluating indicators and metrics is a complicated process that is best done by people with expertise in a specific project type.

A "generalist" CA soldier cannot do the most effective work without some self-study on the project types that are under consideration. Therefore, additional information resources are required for most common project types. These contain metrics that may be selected as MoPs or MoEs, and some are identified below.

Participatory monitoring and evaluation (UN Population Fund, 2004) may serve as a useful model for improving assessment, developing ownership, building capacity, and ensuring sustainability. In this model, beneficiaries assume responsibility for various assessment tasks in lieu of CA soldiers.

Despite the great variety of problems encountered by practitioners in the field, my literature review identified some "core indicators" (Haims *et al.*, 2011) that apply to most projects, developed metrics menus for different project types, and identified additional resources for project planners to consult.

#### **5.1 Core Indicators**

RAND (Haims *et al.*, 2011) developed a list of process metrics ("core indicators") that are common to all project types. These "core indicators" are used to monitor the work as it moves forward to ensure that is proceeding efficiently.

Some examples include:

- Assessment/sustainment plans complete before execution?
- Project completed on time?
- Project completed under budget?
- Project coordinated with relevant USG agencies?
- Baseline assessment completed?
- Project implemented in collaboration with local civilians?
- Number of host nation civilians trained?
- Host nation civilians operate/maintain project after execution?
- Project transfers knowledge to host nation citizens?
- Project information recognizing DoD and host nation government disseminated in local community?

The responses are often "yes/no," a Likert scale, or a count.

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# **5.2 Most Common DoD Projects**

RAND also identified the most common humanitarian assistance projects funded by the DoD. These include:

- Water and sanitation projects.
- Health infrastructure projects.
- Non-health infrastructure projects.
- Health services projects.
- Disaster-related projects.

RAND also developed lists of metrics specifically related to these project types, but these metrics do NOT capture the complexity of many of the issues; they are only a good start. So I have tried to expand upon these lists below.

#### **5.3** Water and Sanitation Overview

Water and sanitation are critically linked because poor hygiene is the most common cause of water contamination.

Most DoD water projects involve building wells or small-scale water treatment. Water projects also may consider building latrines and solid waste disposal or drainage improvement, both of which impact water quality.

Delivery of good quality drinking water is a complex problem.

- Baseline assessment seeks to understand:
  - Current practices for obtaining water.
  - o Current water quality.
  - o Water use patterns.
  - o Duration of need—emergency only or sustained use?
- Water sourcing—surface or ground water?
- Will disinfection be required? How?
- Capacity building—sanitation practices, local maintenance, preventing contamination of drinking water at the source and at the point of use.

#### 5.4 Water and Sanitation Metrics

Some sample metrics for water projects include:

- Number of potable sources created.
- Source improved in accordance with relevant international or local standards.
- Source improved to allow local maintenance.
- Source improvement accounts for local practices, e.g., bathing, watering livestock.

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- Run-off does not cause additional problems, e.g., mosquito breeding area.
- Number of people obtaining water daily/number of people within 500 meters.
- Queuing time at source.
- Volume (recommended amounts for different purposes; see *Sphere Handbook*.)
- Flow rate.
- Turbidity.
- Fecal contamination (source and point of use).
- Chlorine residue after disinfection.
- Chemical contamination.
- Locals maintain facilities?
- Locals monitor water quality?

An additional resource for assessment of the effectiveness of water projects is the World Health Organization's "Core Questions on Drinking-water and Sanitation of Households" survey. It is designed to assess improvements in families' water and sanitation access and practices. It is a fully developed survey (in English at least).

Some sample questions include:

- What is the main source of drinking water for your household?
- How long does it take to go to the water source, get water, and come back?
- Who usually goes to the water source to fetch water?

It is available at:

http://www.who.int/water\_sanitation\_health/monitoring/oms\_brochure\_core\_questionsfinal2460 8.pdf

#### 5.5 Health and Non-Health Infrastructure Overview

Most DoD health projects involve construction or refurbishment of clinics or hospitals.

There are many possible project objectives due to the large number of different health services that could be delivered at a given facility, so there are many possible metrics.

Examples of non-health infrastructure projects include local government facilities (e.g., police stations, council buildings), power plants, schools, orphanages, women's centers, or roads.

Again, the diversity of project objectives yields a large number of potential metrics.

#### **5.6 Infrastructure Metrics**

Health and non-health infrastructure metrics are very similar. Some sample metrics include:

- Project is complete on time and under budget.
- Facility is open.
- Facility is used as intended.

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#### CAA-2012049

- Facility is built to allow local maintenance.
- Facility has trained staff.
- Number of people using facility/number living within 5 kilometers or 1 hour.
- Number of people trained in construction.
- Reduced time to get to markets (road project).

Additional metrics may track the effectiveness of services provided at the project building.

#### **5.7 Health Services Overview**

The development of sustainable health services is fundamentally an exercise in capacity-building.

Often DoD health services projects are related to emergencies or disasters, to the direct provision of services in high need areas, or to the training of local medical personnel.

RAND expects the number of health services projects to increase.

#### **5.8 Health Services Metrics**

The large variety of possible health services objectives makes identification of metrics difficult.

Nevertheless some sample metrics are:

- Children's weights related to their heights.
- Infants' birth weights.
- Rate of immunization.
- Age-specific mortality rates.
- Disease-specific mortality rates.
- Infant and maternal mortality rates.
- Health services are accessible to vulnerable members of the population.
- Birth attendance by trained personnel.
- Availability of key drugs.
- Ratio of population to different kinds of health workers.

Additional metrics can be found in the Sphere Project Handbook's "health assessment checklist" and tools are at Sphere's "sample weekly surveillance reporting."

# **5.9 Disaster-related Projects Overview**

The large number of possible disasters makes disaster planning and disaster-related project assessment difficult.

Disaster aid often overlaps with one or more of the previously discussed categories of assistance—water and sanitation, infrastructure, and health services—or it is related to food and nutrition or shelter.

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# **5.10 Disaster-related Metrics**

Despite the wide variety of disaster scenarios, some sample metrics include:

- Number of structures rebuilt, relocated, or retrofitted.
- Key structures (hospitals, schools) have power and water.
- Displaced persons are informed.
- Number of volunteers trained to implement disaster plan.
- Number of personnel trained to maintain disaster-resistant structures.
- Crude mortality rate.
- Water available per person.
- Food available > 2100 calories per day.
- Shelter space > 3.5 square meters per person.
- Number of toilets available.

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# **6 STUDY QUALITY AND INSIGHTS**

# 6.1 Study Quality

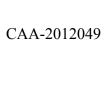
According to Lincoln and Guba (1985), qualitative research should have the following attributes:

- Credibility: Are the results right?
  - The synthetic nature of the inquiry and the strength of the consensus indicate credibility.
- Transferability: Can the results be used in another context?
  - The wide dispersion of development organizations' operations suggests transferability.
- Dependability: Are results reliable over time?
  - o Common assertions that lesser-developed people live in a manner similar to generations of ancestors suggest dependability.
- Confirmability or auditability: Is the method transparent?
  - The wide citation of disparate sources, most of which are freely available online, indicate auditability.

## 6.2 Insights

The study identified several insights:

- Considerable consensus exists in the development community on principles that make assistance more effective.
- Military organizations doing similar work can improve effectiveness by applying these principles.
- Assessment is more easily and better accomplished when planned concurrently with project planning.
- The inclusion of these findings in the next revision of project nomination forms would improve DoD project effectiveness.



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# APPENDIX A PROJECT CONTRIBUTORS

# **A-1 PROJECT TEAM**

Project Director: Adam Shilling, PhD.

Other Contributors: Center for Army Analysis (CAA) reviewers.

# **A-1 PRODUCT REVIEWERS**

Mr. Russell Pritchard, Quality Assurance

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# APPENDIX B REQUEST FOR ANALYTICAL SUPPORT

# REQUEST FOR ANALYTICAL SUPPORT

Performing	g Division: O	A	Accor	unt Number	: 201	2049		FY: 201
Acronym: DALAM			Start	Start Date: 10-Nov-11 Est Con			npl Date	: 15-Mar-12
Title: Deve	lopment Activ	ities Locator and Assessm	ent Method	(DALAM)				
Category:	Current Opera	tions Analysis					Method	: In-house
Sponsor (i.e., DCS-G3) Name: CJTF-HOA				Office Symbol: CJTF-HOA CJ5				
Phone: (31		E-Mail:			POC:	CAPT (U	JSN) Peter	r Haynes
Resource E	estimates:	a. Estimated PSM:	2		b. Es	stimated I	Funds:	\$0.00
				Product: Br	iefing a	nd Report	t	
Study Dire	ector/POC Sig	nature:				Phone:	703-806	-6632
Study Direct	ctor/POC D	r. Adam P Shilling				1 1101101	705 000	-0032
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# APPENDIX C RESOURCES

#### C-1 Selected References

The list below contains a sample of the literature consulted in pursuit of study objectives. The reader will find additional resources for practitioners in the sections below.

- Australian Agency for International Development (2009). *Engaging Not-for-Profit Organisations: Statement of International Development Practice.*
- Development Assistance Committee (1991). *Principles for Evaluation of Development Assistance*. Organisation for Economic Co-operation and Development.
- High Level Forum (2005). Paris Declaration on Aid Effectiveness: Ownership, Harmonisation, Alignment, Results and Mutual Accountability.
- Interaction (no date). *Principles for Effective Assistance*.
- International Committee of the Red Cross (1996). The Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief.
- Lincoln, Y. S., & Guba, E. A. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage.
- Natsios, A. (2005). The Nine Principles of Reconstruction and Development. *Parameters*, Autumn 2005. pp. 4-20.
- Natsios, A. (2010). *The Clash of the Counter-Bureaucracy and Development*. Center for Global Development Essay.
- Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response ("Sphere Handbook").
- U.S. Agency for International Development (2011). *The Nine Principles of Development*.

# C-2 Comprehensive Practitioners' Resources

There are several resources that are comprehensive in nature. They address a number of development areas, and provide a basic understanding of the issues in those areas, or contain information appropriate to all project types.

I have identified five such resources. Four of them are available in electronic format at no cost online. Only the *Oxfam Handbook* requires purchase, but used copies are available for little money.

- Haims et al. (2011). Developing a Prototype Handbook for Monitoring and Evaluating DoD Humanitarian Assistance Projects. RAND.
  - o Relatively brief discussion of the importance of assessment.
  - Develops a conceptual model to drive assessment, and identifies "core indicators" that gauge a project's progress during execution.
  - o A short list of metrics for each of the five common project types.

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- Oxfam (1995). The Oxfam Handbook of Development and Relief (in three volumes).
  - A bewilderingly comprehensive introduction to the issues of many, many facets of relief and development.
  - o Too many subjects to list.
  - Chapters end with "Key Questions" that illuminate important issues and provide seed for metrics.
- The Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response (commonly called the "Sphere Handbook").
  - Sphere Project, a consortium of NGOs, "identified a set of minimum standards in key life-saving sectors," including water supply, sanitation and hygiene promotion; food security and nutrition; shelter, settlement and non-food items; and health action
  - Chapters are organized into Minimum Standards, Key Actions, Key Indicators, and Guidance Notes that contain a wealth of possible metrics and notes on how to use them to improve service delivery.
  - o Each chapter offers a "Further Reading" section with many more resources.
- United Nations Population Fund (2004). *Stakeholder Participation and Monitoring*. Programme Manager's Monitoring and Evaluation Toolkit.
  - o Explains the benefits of participatory assessment.
  - o Available: <a href="http://www.unfpa.org/monitoring/toolkit/stakeholder.pdf">http://www.unfpa.org/monitoring/toolkit/stakeholder.pdf</a>
- USAID (2005). Field Operating Guide v. 4.0.
  - Contains detailed information on conducting baseline assessments, and a series of "Assessment Checklists" that ask relevant questions that might serve as bases for metrics.
  - The chapter titled "Information on Populations at Risk" contains a variety of possible metrics expressed in paragraphs.
  - o Contains information on water, food and nutrition, health, shelter and settlements, sanitation and environmental health, and agriculture and livestock.

# **C-3 Water and Sanitation Resources**

- WaterAid UK (no date). Technology Notes.
  - o A brief introduction to water provision issues.
  - <a href="http://www.wateraid.org/uk/what\_we\_do/sustainable\_technologies/technology\_no-tes/default.asp">http://www.wateraid.org/uk/what\_we\_do/sustainable\_technologies/technology\_no-tes/default.asp</a>
- World Health Organization (2011). Guidelines for Drinking-water Quality, 4th Ed.
  - A comprehensive reference (>500 pages) on the issues surrounding the provision of quality drinking water.

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- World Health Organization (2006). Core Questions on Drinking-water and Sanitation for Household Surveys.
  - A fully-developed survey for assessing the effectiveness of drinking water/sanitation projects.
- The World Health Organization (WHO) provides many references on water and sanitation:
  - <a href="http://www.who.int/water\_sanitation\_health/en/">http://www.who.int/water\_sanitation\_health/en/</a>
- The U.S. Environmental Protection Agency also provides useful info:
  - o <a href="http://water.epa.gov/">http://water.epa.gov/</a>

#### C-4 Infrastructure Resources

- USAID (2005). Field Operating Guide v. 4.0.
- Local national or U.S. building codes.
- The "International Building Code."
- Appropriate technical expertise from engineers, architects, contractors, or skilled tradesmen.

#### C-5 Health Services Resources

- Appropriate trained health care practitioners—medics, nurses, doctors, therapists, etc.
- U.S. Department of Health and Human Services:
  - o <a href="http://healthypeople.gov/2020/default.aspx">http://healthypeople.gov/2020/default.aspx</a> and click tab for "leading health indicators"
- Center for Disease Control:
  - o <a href="http://www.cdc.gov">http://www.cdc.gov</a> and choose from "health and safety topics" on the home page.
- Werner et al. (2010). Where There Is No Doctor: A Village Health Care Handbook.
  - o <a href="http://weblife.org/pdf/where there is no doctor.pdf">http://weblife.org/pdf/where there is no doctor.pdf</a>
- Dickson (2010). Where There Is No Dentist:
  - o http://weblife.org/pdf/where there is no dentist.pdf

#### C-6 Disaster-related Resources

Other references previously mentioned regarding water, sanitation, health care, or infrastructure.

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